
Performance Metrics for Information Technology Programs

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Information Technology Performance Metrics

- Clinger-Cohen Act emphasizes need to justify Information Technology programs in terms of performance
- Traditional emphasis has been on performance of business programs
 - Efficiencies and cost savings
 - “Return on Investment”
 - “Benefits” that accrue to the user – usually monetized to improve ROI
- Non-IT warfighting programs measure effectiveness with “performance” metrics – functionality, capability
 - Bombs on target
 - Sorties per day
 - Logistics tonnage delivered
- Can we use performance metrics for both business and warfighting IT programs?

Effectiveness Metrics

- Want to measure IT effectiveness to explain to decision maker why DoD should “buy this program”
 - Attempt to quantify effectiveness for as many aspects as possible
 - Report other aspects in “qualitative” descriptive terms
 - Consider IT “improvements” (user friendly, fewer steps) in addition to “warfighting” aspects
- Quantify or explain capabilities improvements for this program or release compared to previous program or release
 - What do we get that we didn’t have before?
 - How do capabilities relate to ORD requirements?
 - How are we progressing toward meeting the “full” requirement?

Performance Assessments

Example Performance Measures

- All measures require discussion of “specifics” – what are you really claiming will be done?
- Some might be quantifiable

<u>Quantify?</u>	<u>"Non-warfighting" Performance Improvements</u>
Y	Reduces number of processes required to perform a task Uses personnel more efficiently Increases productivity Improves functionality Increases security Increases safety
Y	Increases reliability
Y	Reduces cost
Y	Extends product life
Y	Reduces errors Reduces complexity
Y	Increases user satisfaction Improves operating system environment Improves software integration Automates processes Improves information flow or communications Improves planning Improves help desk and program support services

Problems with Performance Metrics???

- OMB is looking for economic measures
 - Key aspect of IT-300 exhibit
 - Supports President's Management Agenda
- IT programs should be means for organizations to generate efficiencies and cost savings
 - If we move too far toward Performance, we might lose this focus
- Performance measures can be subjective
 - Particularly difficult for business programs

Presentations

- John Higbee, DAU – Metrics for measuring program cost, schedule & performance
- John Goodhart, Navy – Metrics for measuring Navy logistics program
- Ron Pace, Medical – Metrics for measuring Medical patient care program

Questions to Consider

- Is ROI the right measure for business programs? Warfighting?
- Are other performance metrics more appropriate?
- Are alternate measures suitable? Or just ways of masking poor economic justification?
- Which are more important: economic or performance measures?
- MEDICAL: Do you have any feedback from this program (or others in Medical) that show how will the post-deployment analysis is matching up with the expectations during program development?
- NEMAIS: How are metrics for the pilots being used to develop metrics for the Converged ERP program?
- PROGRAM SUCCESS: Some of the metrics appear a bit subjective (such as “Program Success Probability Summary” and “Requirements Status”); how do you measure them so you can plot them?